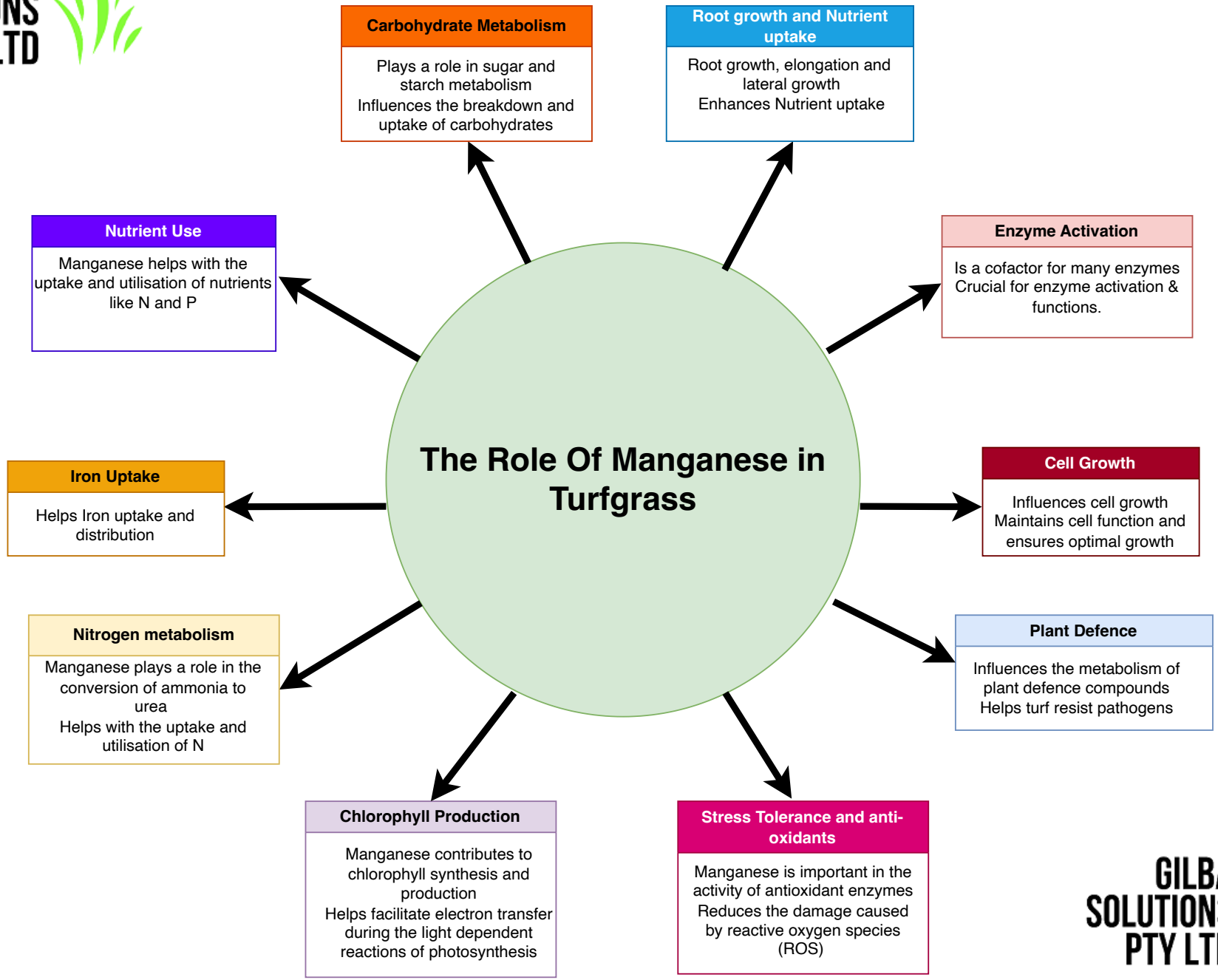
The Role of Manganese in Turfgrass


The Role Of Manganese in Turfgrass
Carbohydrate Metabolism
Plays a role in sugar and starch metabolism
Influences the breakdown and uptake of carbohydrates
Root growth and Nutrient uptake
Root growth, elongation and lateral growth
Enhances Nutrient uptake
Nutrient Use
Manganese helps with the uptake and utilisation of nutrients like N and P
Enzyme Activation
Is a cofactor for many enzymes
Crucial for enzyme activation & functions.
Iron Uptake
Helps Iron uptake and distribution
Cell Growth
Influences cell growth
Maintains cell function and ensures optimal growth
Nitrogen metabolism
Manganese plays a role in the conversion of ammonia to urea
Helps with the uptake and utilisation of N
Plant Defence
Influences the metabolism of plant defence compounds
Helps turf resist pathogens
Chlorophyll Production
Manganese contributes to chlorophyll synthesis and production
Helps facilitate electron transfer during the light dependent reactions of photosynthesis
Stress Tolerance and anti-oxidants
Manganese is important in the activity of antioxidant enzymes
Reduces the damage caused by reactive oxygen species (ROS)